Fast Projects That Are of Great Value

Tangible Result Driver – Dave Nichols,
Director of Project Development

MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.

Fast Projects That Are Of Great Value

Percent of estimated project cost as compared to final project cost

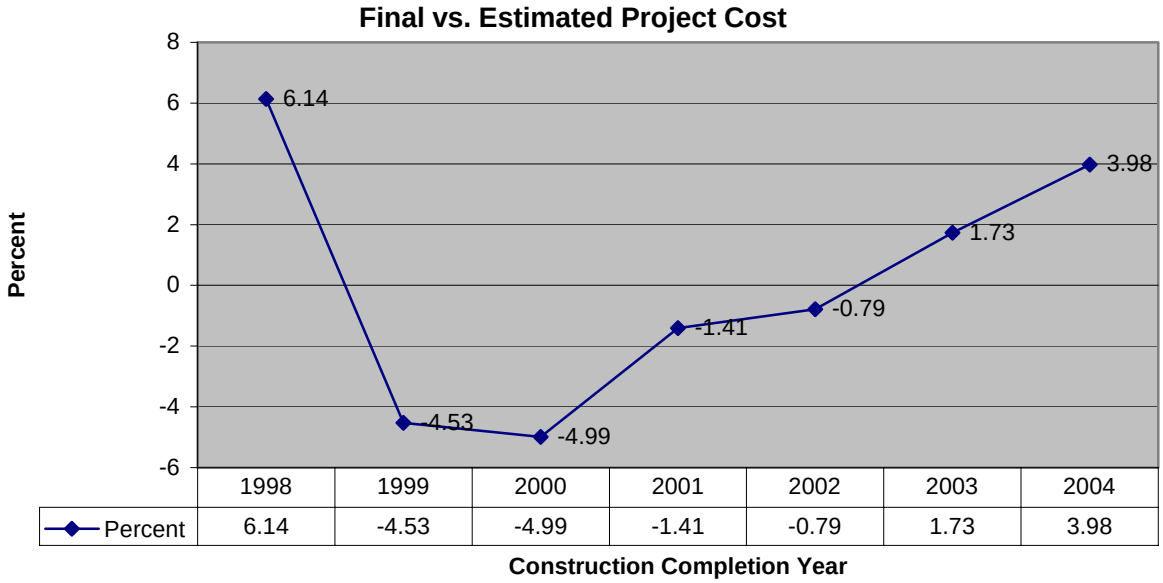
Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Kyle Kittrell, Transportation Planning Director

Purpose of the Measure:
This measure determines how close MoDOT's total program completion costs are to the estimated costs.

Measurement and Data Collection:
The department determines the completed project costs and compares them to the estimated costs. The completed project costs are reported during the calendar year the project is completed.

Project costs include design, right of way purchases, utilities, construction, inspection and other miscellaneous costs. The estimated cost is based on the amount included in the most recently approved Construction Program, which is part of the Statewide Transportation Improvement Program. Completed costs include actual expenditures.

Improvement Status:
In 1998, when MoDOT began tracking this information, the final costs were 6 percent over estimated costs. In 2000, projects were completed 4.99 percent under the estimates. Since then, final costs have risen to 3.98 percent over estimated costs in 2004.



Positive numbers indicate the final (completed) cost was higher than the estimated cost.

Fast Projects That Are Of Great Value

Percent of projects completed within budget

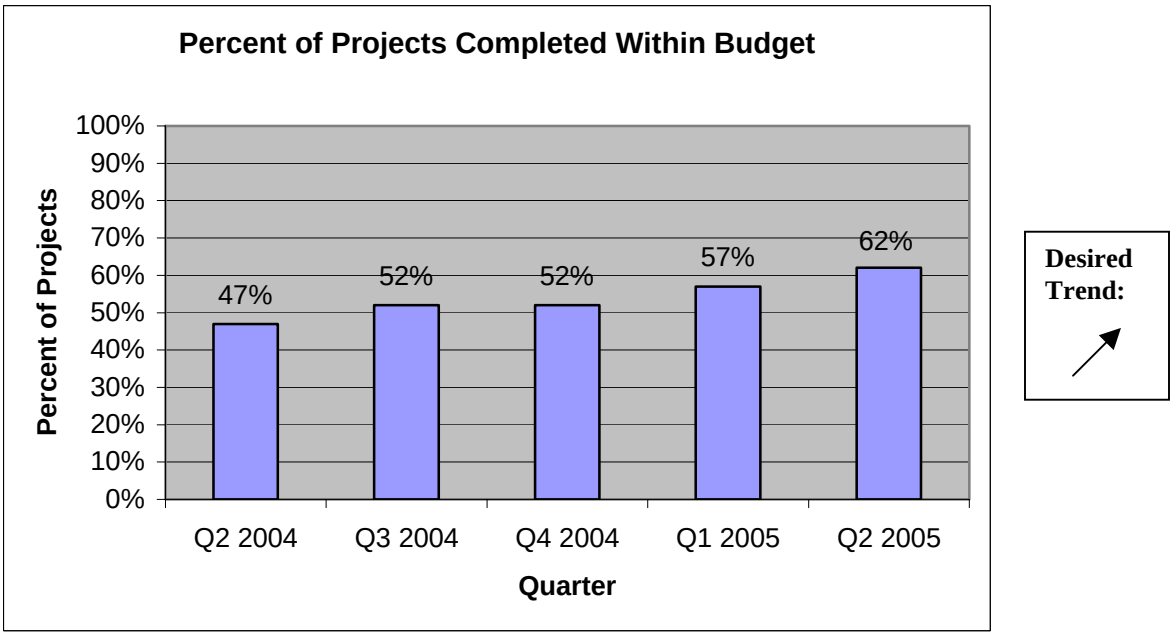
Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Dave Ahlvers, State Construction Engineer

Purpose of Measure:
The measure tracks the percentage of projects completed within the programmed amount. The cost includes such items as engineering, right of way, and contract payments.

Measurement and Data Collection:
Working day and calendar day completion dates are recorded in the contract. The actual completion date is established by final acceptance for maintenance by the Resident Engineer. Both milestones are recorded in the SiteManager database.

Improvement Status:
The graph below shows that more than half of all projects come in close to the amount estimated. The following strategies will be used to improve performance in this area.

- Be active members on project teams so that constructability and plan errors are addressed prior to the letting
- Increase the use of value engineering
- Hold post-construction conferences on selected projects



Fast Projects That Are Of Great Value

Percent of projects completed on time

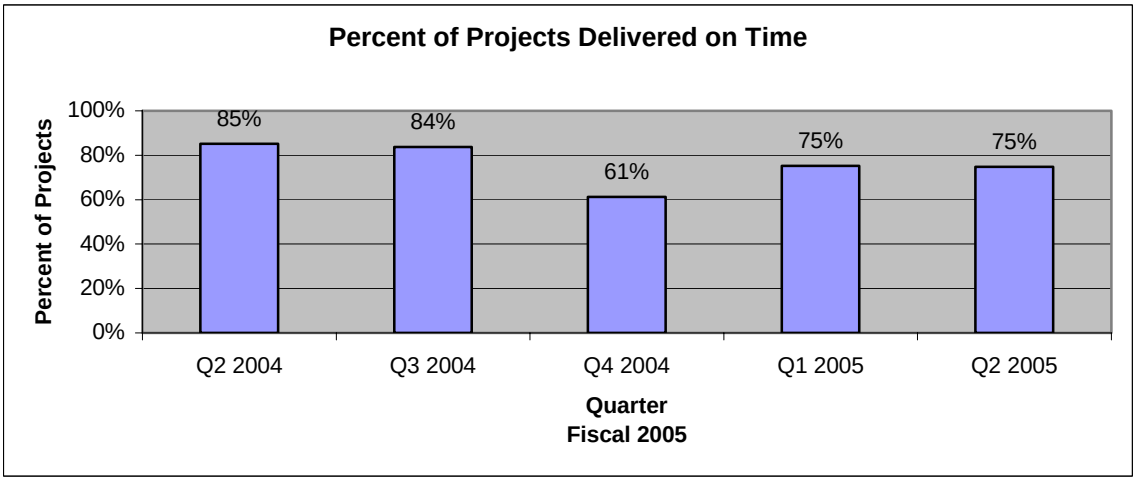
Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Dave Ahlvers, State Construction Engineer

Purpose of the Measure:
This measure tracks the percentage of projects completed by the commitment date established in the contract. It will indicate MoDOT's ability to complete projects by the date communicated.

Measurement and Data Collection:
The project manager will establish project completion dates for each project. This will be documented in the SiteManager and STIP databases. It will be part of the PS & E submittal. The actual completion date will be documented by the RE and placed in SiteManager.

Improvement Status:
MoDOT completed projects in the 75 percent range; and the goal will be to improve to 80 percent. Improvement strategies include:

- Decisions will be made in a timely manner and at the field level when possible.
- Utilize the conflict resolution process to resolve disputes.
- Pre-acceptance list will be used so that material can be immediately incorporated into the product when it reaches the job site.
- Reduce delays resulting from utility conflicts by improving cooperation and coordination with utility companies and contractors. A greater effort will be made to clear utilities prior to the letting of the projects.
- Regular project meetings will be held to discuss prosecution and progress.



Fast Projects That Are Of Great Value

Percent of change for finalized contracts

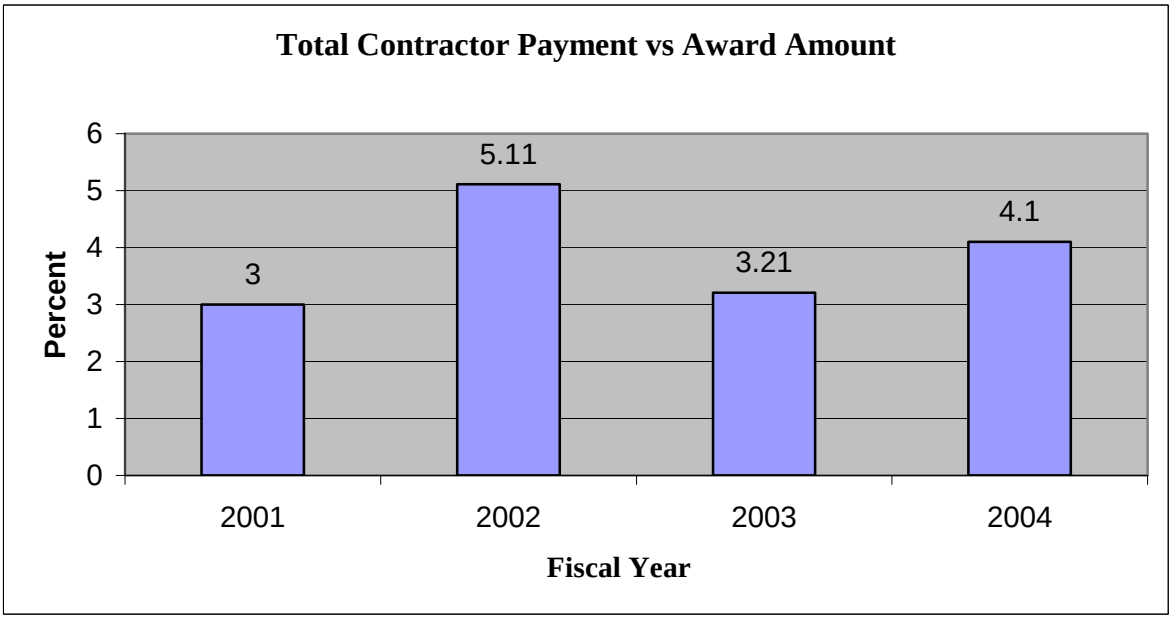
Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Dave Ahlvers, State Construction Engineer

Purpose of the Measure:
The measure tracks the percentage difference of total construction payouts to the contract award amount. This indicates how closely MoDOT is building construction projects to the amount awarded to the contractor.

Measurement and Data Collection:
Contractor payments are generated through the SiteManager database and processed in the Financial Management System for payment. Change orders document the underrun/overrun of the original contract.

Improvements Status:
MoDOT's performance on this item in 2004 was 4.1 percent with a goal of ±3 percent. The following strategies will be used to improve performance in this area.

- Be active members on project teams so that constructability and plan errors are addressed prior to the letting.
- Increase the use of value engineering.
- Hold post-construction conferences on selected projects.
- Pay contractors in a timely and equitable manner. Profitability is a key component in maintaining a strong contracting industry.



Fast Projects That Are Of Great Value

Average construction cost per day by contract type

Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Dave Ahlvers, State Construction Engineer

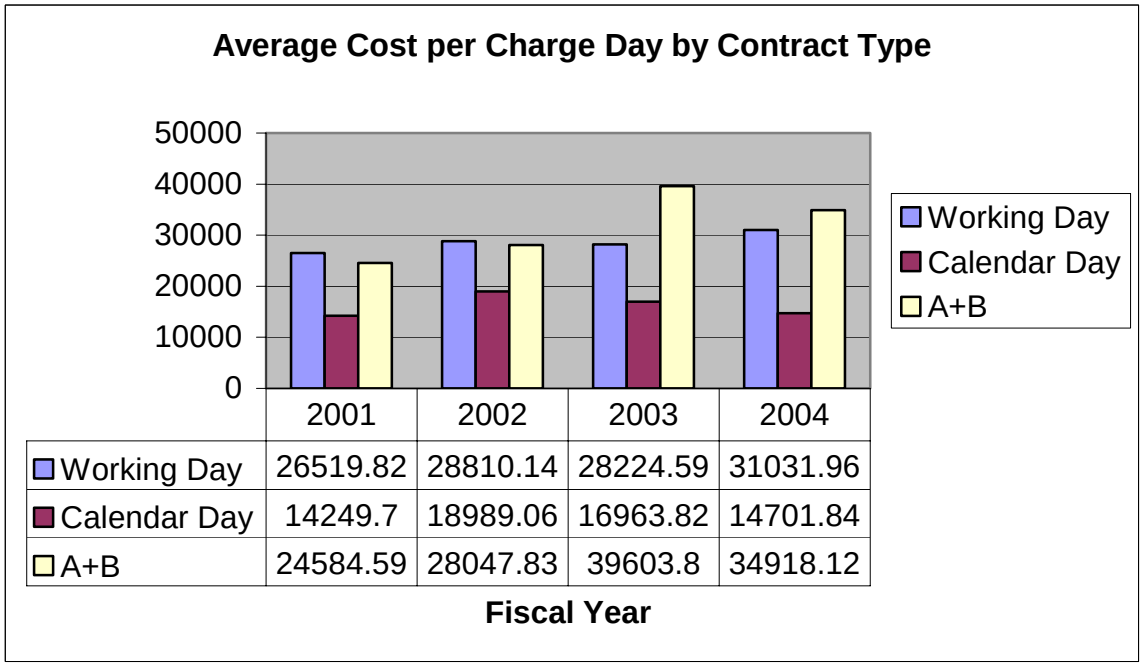
Purpose of the Measure:
This measure tracks the cost per day for project completion to determine the impact to the traveling public, enabling MoDOT to better manage project completion needs.

Measurement and Data Collection:
This information is gathered by extracting the actual time used for construction from the Summary of Working Days in the SiteManager database and dividing it by the total costs of the project.

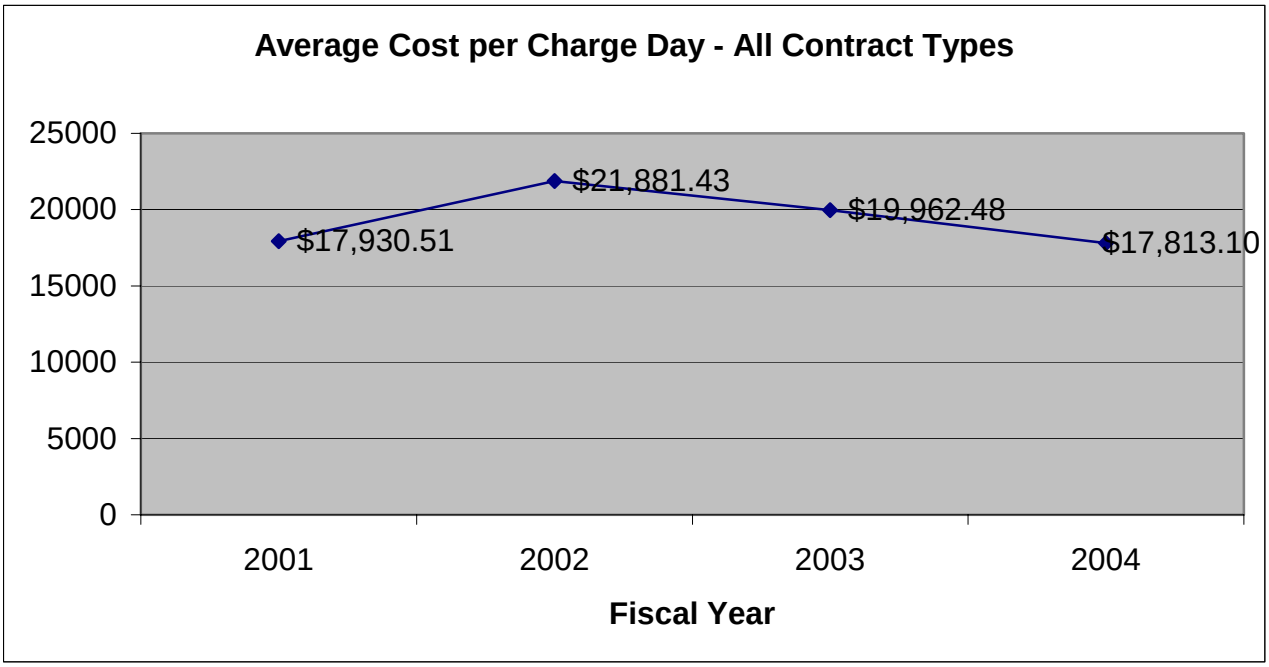
The measurement groups construction contracts into three categories:

- **WD** working day contracts
- **CD** calendar day contracts and;
- **A + B** or innovative contracts that provide incentive/disincentives to the contractor for early completion.

Improvement Status:
The data shows contracts that more closely control the contractor cost more, but result in faster project completion and fewer delays to the traveling public. MoDOT can reduce costs by giving contractors more freedom, but the result is that projects take longer to complete.



	2001	2002	2003	2004
Working Day	26519.82	28810.14	28224.59	31031.96
Calendar Day	14249.7	18989.06	16963.82	14701.84
A+B	24584.59	28047.83	39603.8	34918.12


Average Cost per Charge Day - All Contract Types
25000
20000
15000
10000
5000
0
$17,930.51
$21,881.43
$19,962.48
$17,813.10
2001
2002
2003
2004
Fiscal Year

Fast Projects That Are Of Great Value

Number of calendar days it takes to go from the programmed commitment on the Statewide Transportation Improvement Program to the project opening to traffic

Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Kyle Kittrell, Transportation Planning Director

Purpose of the Measure:
This measure will determine how quickly projects go from the programmed commitment to being used by the public. Customers perceive this time as 'project wait-time.'

Measurement and Data Collection:
MoDOT will compare how long it takes from when the project is added to the Statewide Transportation Improvement Program to when the construction work is finished and the public is using the new transportation improvement. This will be categorized by the type of work. MoDOT will be able to provide this data in mid-March.

Improvement Status:

Measure is Under Development

Fast Projects That Are Of Great Value

Percent of projects that meet national averages for timeliness

Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Diane Heckemeyer, State Design Engineer

Purpose of the Measure:
The planning, design and construction process associated with a MoDOT project can be a lengthy one for a variety of reasons. MoDOT's customers do not understand the length of the process, often using this lack of understanding to form a negative view of the department. Comparing the time it takes for MoDOT to complete projects of a similar type with those from other DOTs could help it demonstrate its level of performance to the public, could point out the need for greater educational efforts by the department and could add to the need for partnering and streamlining actions.

Measurement and Data Collection:

Improvement Status:

Measure is Under Development

Fast Projects That Are Of Great Value

Percent of projects that meet national averages for value

Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Diane Heckemeyer, State Design Engineer

Purpose of the Measure:
Despite the fact that the general public does not have a good handle on just how expensive highway and bridge projects are, they do find projects to be of great value once they are constructed and open to traffic. Validating that assumption with this measure could aid MoDOT's efforts to receive additional funding that would enable it to take better care of the statewide system with more projects of great value.

Measurement and Data Collection:

Improvement Status:

Measure is Under Development